

*Occultations of Stars by the Moon observed at the Royal Observatory,  
Greenwich, in the year 1916.**(Communicated by the Astronomer Royal.)*

Date and G.M.T. 1916.				Star and Phase of Occultation.	Magni- tude.	Obser- ver.	Aper- ture.
d	h	m	s				inches.
Jan. 15	12	5	1'43	$\chi$ Tauri, D	5.3	A.C.	$2\frac{3}{4}$
"			1'14	" "	"	R.C.	$6\frac{3}{4}$
"			1'13	" "	"	F.J.	10
Feb. 7	9	27	22'57 <sup>a</sup>	W.B. O., 579, D	6.5	A.C.	$2\frac{3}{4}$
May 8	11	31	25'58	$\alpha'$ Cancri, D	5.9	A.C.	$2\frac{3}{4}$
"			25'12	" "	"	W.	10
Sept. 15	15	22	18'06 <sup>b</sup>	$\epsilon$ Arietis, R	4.6	A.C.	$2\frac{3}{4}$
	16	11	41 50'90	26 Tauri, D*	6.6	H.	10
	16	12	3 48'30 <sup>c</sup>	27 Tauri, D*	3.7	H.	10
	16	12	23 35'76	28 Tauri, D*	5.2	H.	10
	16	12	55 5'21	27 Tauri, R	3.7	H.	10
Nov. 2	8	35	56'85	94 B Capricorni, D	5.7	A.C.	$2\frac{3}{4}$
	7	6	47 23'74	212 B Piscium, D	7.1	H.	10

Phenomena marked with an asterisk occurred at the Moon's Bright Limb; all other phenomena at the Dark Limb. The telescopes used are as follows:—

Aperture 10 in., Astrographic Equatorial (Guiding Telescope).

"  $6\frac{3}{4}$  in., Sheepshanks Equatorial.

"  $2\frac{3}{4}$  in., Portable telescope in Altazimuth Dome.

The initials H., A.C., W., R.C., F.J., are those of Mr. Hollis, Mr. Crommelin, Mr. Witchell, Mr. Cullen, and Mr. Jeffreys respectively.

*Notes.*

*a.* The star was too faint to hold steadily.

*b.* Clouds passing; the power employed was too low to show the duplicity of the star.

*c.* The observer noted that the count of seconds was doubtful.

*Royal Observatory, Greenwich:*

1917 Jan. 11.

*Micrometrical Measures of Double Stars (11th Series) and New Double Stars.* By Rev. T. E. Espin, M.A.

The measures in the following list have been made with the 24-in. Calver reflector, with the exception of a few stars measured in the early part of 1914. Of the following stars of *h* there are, as far as I am aware, no other measures :—

<i>h</i> 1014	<i>h</i> 1715	<i>h</i> 2557
1017	1765	2559
1021	1831	2564
1031	1932	2568
1385	1978	2803
1571	2516	2869

Two of *h*'s stars I have been unable to find :—

(1) *h* 1679 was searched for on 1916 December 15. It is certainly identical with *h* 1673, the R.A. being one minute too great, and the position angle being reversed.

(2) *h* 2593, searched for on 1916 April 22, 28, May 3, and not found.

Name.	R.A. 1900.	Decl.	P.	D.	Mags.	Nts.	Date.	Year.
	<sup>h</sup> <sup>m</sup>	<sup>°</sup> <sup>'</sup>	<sup>°</sup>	<sup>"</sup>				
+44° 4550	0 0'0	+44 40	235° 1	20" 37	6'5 9'2	2	'991	14
A 110	0'6	42 6	122° 1	1'77	9'2 9'3	2	'902	16
Espin 153	11'2	40 44	242° 2	2'37	9'5 10'6	3	'004	17
<i>h</i> 1014	13'4	41 56	50° 5	11'51	9'4 9'5	2	'939	16
<i>h</i> 1017	14'8	41 59	263° 1	16'43	9'8 11'2	2	'939	16
<i>h</i> 1021	16'6	41 40	246° 7	6'08	9'1 9'5	4	'950	16
<i>h</i> 1978	24'9	43 36	223° 2	5'61	9'5 9'7	4	'925	16
<i>h</i> 1031	27'1	41 10	142° 8	6'16	9'6 11'5	3	'973	16
ρ 62	29'7	44 17	310° 5	6'79	9'1 10'0	2	'961	14
Espin 444	31'4	44 57	193° 0	2'63	9'2 9'5	2	'843	14
Espin 445	32'6	44 54	348° 7	3'82	9'3 10'3	1	'865	14
Σ 44	33'0	40 26	266° 8	10'30	8'6 9'2	2	'961	16
Espin 157	1 7'8	40 37	92° 1	15'85	7'0 12'8	3	'978	16 AB
			48° 0	19'68	13'2	2	'981	AC
Arg. vi. 3	8'9	42 23	288° 9	11'60	8'8 9'0	2	'861	16 BC
			101° 9	34'36	A = 8'3	2	'861	16 AB
Espin 4	25'2	43 6	97° 1	3'18	7'9 8'8	2	'100	16
+43° 322	28'8	42 45	94° 8	44'38	8'6 8'8	2	'018	16
A 1527	55'2	43 11	238° 8	5'21	8'2 10'1	3	'079	16
Espin 48	2 3'4	42 23	200° 1	9'27	7'4 11'0	3	'102	16
ρ 66	13'0	42 32	187° 4	6'10	9'3 10'2	2	'891	16